UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TENNESSEE

DONALD F. GREENE and NICOLE F. GREENE,)
Plaintiffs,)
v.) No.: 3:21-CV-256-TAV-JEM
LEDVANCE LLC,)
Defendant.)

MEMORANDUM OPINION AND ORDER

This matter is before the Court on defendant's motion for summary judgment [Doc. 27]. Plaintiffs have responded [Docs. 32], and defendant has replied [Doc. 36]. Plaintiffs have filed a supplement [Doc. 54], and defendant has responded [Doc. 55]. Having been fully briefed, the motion is ripe for review. *See* E.D. Tenn. L.R. 7.1(a). For the reasons that follow, defendant's motion for summary judgment [Doc. 27] will be **GRANTED in part** and **DENIED in part**.

I. Background

This is a products liability matter. Donald Greene ("plaintiff") sustained severe injuries, primarily to his left arm, while removing an eight-foot fluorescent bulb from its fixture at work [Doc. 26, ¶ 4]. Plaintiff and his wife, Nicole Greene, ("plaintiffs") bring claims against defendant LEDVANCE LLC ("defendant"),¹ which designed,

¹ Plaintiffs originally sued both LEDVANCE LLC and OSRAM SYLVANIA, Inc. [Doc. 1-1]; however, a Stipulation of Dismissal without prejudice [Doc. 20] was entered as to OSRAM SYLVANIA.

manufactured, sold, and distributed the fluorescent bulb, under the Tennessee Products Liability Act ("TPLA"), Tenn. Code Ann. § 29-28-101, *et seq.*, alleging that "the bulb suddenly, and without warning, violently exploded" [*Id.* at ¶¶ 1, 4, 6].

A. Plaintiff's Accident

Plaintiff has worked in the waste management industry for approximately 37 years [Doc. 32-1, pp. 3–4, 55]. In 2020, he worked as a site manager for Waste Connections [*Id.* at 5–6, 55]. As part of his duties, he was responsible for site maintenance, including lighting maintenance, at a garbage transfer station in Lenoir City, Tennessee [*Id.* at 5, 8, 12, 56]. In June 2020, plaintiff was informed that several eight-foot fluorescent bulbs were burned out in some light fixtures inside a garage bay at the transfer station [*Id.* at 17, 56]. The bulbs in these fixtures had been in place without change or replacement since Lloyd's Electric Service ("Lloyd's") installed them on December 4, 2013 [*Id.* at 14, 56, 59; Doc. 32-2, p. 3]. The installation of these bulbs occurred before plaintiff worked at the transfer station, so he had no personal knowledge about the installation [Doc. 27-3, pp. 6–7]. On June 10, 2020, plaintiff and his supervisor purchased new Philips-brand eight-foot fluorescent bulbs at Home Depot to use as replacements [Doc. 32-1, pp. 16–17, 56–57; Doc. 27-5, pp. 54–55].

While alone in the garage on June 11, 2020, plaintiff set out to change the fluorescent bulbs that needed to be replaced [Doc. 32-1, pp. 15, 18–19, 21–23, 40–41, 57]. Plaintiff explained his process for changing out the bulbs, stating he "took the lights and got them set up, got the ladder set up, turned the power switch off on th[e] breaker, turned

the light switch off[,] [g]ot everything set up, made sure there were no trucks coming through" [Id. at 19, 21]. Plaintiff then described how he was injured while removing the fluorescent bulb at issue:

I set my ladder to the right of the fixture near the breaker box, with the conduit running between both legs of the ladder. I climbed up two, three, or four rungs and leaned against the ladder, then reached to my left to remove the top bulb from the fixture, holding the bulb with both hands. I did not strain to reach the bulb. While holding the bulb with both hands, I pulled the bulb to the right releasing the left end of the bulb from the fixture. After the left end of the bulb released from the fixture, I moved the right end of the bulb to the left to fully remove the bulb from the fixture. Immediately after removing the light fully from the fixture, it popped and exploded.

I did not strike the lightbulb on any other object, I did not crush the lightbulb in my hand, I did not drop the lightbulb, and I did not fall on the lightbulb. I quickly came off the ladder, holding my bleeding upper left arm, the ladder did come off the wall falling to my left, but I did not fall to the floor. I came down the ladder on my feet.

[*Id.* at 57–58]. Plaintiff stated that both fluorescent bulbs in the fixture were behaving as bulbs that were burned out, but otherwise appeared in typical condition without any scratches or scuff marks [*Id.* at 58].

Plaintiff testified that he was as careful as he could be as he removed the fluorescent bulb from the fixture on the date of the incident [*Id.* at 23–24]. Plaintiff stated that he was familiar with the need to be careful to avoid striking the fluorescent bulb or otherwise handling the bulb in such a way that the glass would break [*Id.* at 23, 57]. While familiar with the fact that a fluorescent glass tube bulb might break if fallen upon or struck upon another object, plaintiff stated that he "never expected that during normal handling, such a bulb could or would implode and then forcibly disperse glass in a manner that looked and

felt like an explosion, and could cause the type of injury that [he] sustained" [*Id.* at 57]. Chris Childers, Regional Safety Manager, and Jason McCue, plaintiff's supervisor, testified that they are familiar with the fact that an eight-foot glass tube can break if it is dropped, hit against the wall, or knocked against something [Doc. 27-4, pp. 3–4; Doc. 27-5, p. 3].

Plaintiff testified that he had experience changing eight-foot fluorescent bulbs in his home garage, and he had changed many fluorescent tube light bulbs in similar fixtures to what he changed on the date of the incident, including four-foot fluorescent bulbs in another bay of the transfer station [Doc. 32-1, pp. 14–15, 57]. Because he had changed these types of fixtures before and never had an issue, plaintiff stated that he did not look for or see any warnings on the Philips replacement bulbs that were purchased [Doc. 27-3, pp. 16–17]. Plaintiff did not wear anything to protect his head or hands while changing the light fixture, and he had no specific training on how to change a fluorescent bulb [*Id.* at 16; Doc. 32-1, pp. 14–15]. Plaintiff did not secure the ladder, which he retrieved from another bay, in any manner before changing the light fixture, and he had no specific training on how to use a ladder [Doc. 32-1, p. 24; Doc. 27-3, pp. 13–14, 19].

Following the accident, plaintiff called both his wife and Childers to say he was badly injured [Doc. 32-1, pp. 32, 58]. Childers testified that plaintiff told him during the call that he had fallen and was hurt and bleeding [Doc. 32-5, pp. 6, 17]. Soon after, paramedics treated plaintiff at the scene and then transported him to the hospital by ambulance [Doc. 32-1, pp. 34–35]. At the hospital, Christine Seaworth, M.D. surgically

treated and closed plaintiff's left bicep wound [Doc. 32-4, p. 17]. Within the next several weeks, Joshua P. Moss, M.D. performed two additional surgeries on plaintiff's left bicep, the first to debride the area and the second to reconstruct the bicep [*Id.* at 18]. Dr. Moss continued to treat plaintiff on an as-needed basis for continuing issues stemming from the injury to his left arm [*Id.* at 19].

After plaintiff left for the hospital, maintenance personnel from Waste Connections cleaned up scattered debris from the accident scene, disposing of the remnants of the fluorescent bulb at issue and pieces of flesh torn from plaintiff's arm [Doc. 27-4, pp. 5–6; Doc. 32-5, pp. 13–15, 22]. On the same date, these workers installed the new fluorescent bulbs in the area of the accident with a scissor lift [Doc. 27-4, pp. 8–9]. Childers, who took photographs of the scene, stated that one photograph shows the two fluorescent bulbs replaced in the fixture that day were working [*Id.* at 7–8; *see also* Doc. 27-7, p. 2; Doc. 32-1, p. 54]. Childers also confirmed that the ladder involved in the incident was taken out of use for a period of time because it was deemed unsafe [Doc. 27-4, pp. 10–11]. Later, at the direction of his district manager, plaintiff disposed of the ladder [Doc. 32-1, pp. 36–37].

Waste Connections investigated plaintiff's accident and prepared several reports, including a Tailgate Incident Report Form ("Tailgate form") [Doc. 27-8, p. 2]. The Tailgate form concluded that the accident was "[p]reventable" and the root cause was "fail[ure] to use proper equipment," stating:

On June 11, at 8:26 AM, [plaintiff] Greene was attempting to change some fluorescent light bulbs, when he slipped and fell during the process. [Plaintiff] received a scratch on his forehead as well as a moderate cut to his left arm (inner bicep). An employee of another business was in close

proximity to [plaintiff] at the time of the incident and was able to assist him while another employee called 911. Paramedics transported [plaintiff] to UT Medical Center, where he was admitted for further evaluation. There was a ladder present at the scene right below the light in which [plaintiff] was attempting to change. This is still under investigation.

[Id.]. Waste Connections also completed the Employer's First Report of Work Injury or Illness form to the Tennessee Department of Labor and Workforce Development ("Tennessee DOL form"), which described the incident as follows: "While the [employee] was standing on a ladder replacing a fluorescent bulb at the transfer station, the ladder slipped and the [employee] bumped his head on the wall and fell to the floor. The [employee] sustained lacerations on his forehead and upper arm. The [employee] was transported by ambulance." [Doc. 27-9, p. 2]. This report also stated the injury was not caused by a product, and the NCCI coding showed the cause of the injury was a "Fall or Slip Injury" with the direct cause being "From ladder or scaffolding" [Id. at 4–5]. Waste Connections also reported plaintiff's injury to Tennessee OSHA by stating: "Employee fell off ladder while attempting to change light bulbs. Employee subsequently fell, striking head, and cutting inner left arm" [Doc. 27-10, p. 2].

Plaintiff notified Childers and other management by e-mail that a daily claims report was not accurate in that he did not slip and fall off the ladder while changing the bulb, but rather the bulb exploded which caused him to fall off the second or third rung of the ladder [Doc. 32-1, pp. 40–41, 48–49; Doc. 32-5, pp. 9–10]. Plaintiff directed his wife to make handwritten edits to the Tailgate and Tennessee DOL forms and to a photograph of the accident scene to correct erroneous information about how the accident occurred and where

the ladder was located [Doc. 27-3, pp. 29–31; Doc. 27-11, p. 2; Doc. 32-1, pp. 42–47, 58]. McCue and Childers did not recall seeing the edits, and McCue testified that the incident was preventable because the wrong ladder was used [Doc. 27-5, pp. 9–13; Doc. 27-4, p. 13]. In the e-mail exchange with plaintiff, Childers explained that the daily claims report was prepared based on what information they had, and there was more concern about plaintiff's well-being than the accuracy of the accident [Doc. 32-1, pp. 40–41; Doc. 32-5, pp. 18–19].

Plaintiff filed a claim for workers' compensation related to his injuries and reached a settlement of that claim [Doc. 27-13, pp. 2–4]. The Workers' Compensation Settlement Agreement describes plaintiff's accident as follows: "[e]mployee was standing on a ladder changing a fluorescent light bulb when the lightbulb suddenly exploded, causing traumatic disruption of tissue, skin, biceps musculature and biceps tendon, from the area of the left elbow and biceps muscle complex" [*Id.* at 2].

B. Procedural History

i. Plaintiffs' claims

This products liability suit was filed by plaintiffs in Loudon County Circuit Court on June 10, 2021 [Doc. 1-1], and defendant removed the action to this Court based on diversity jurisdiction on July 15, 2021 [Doc. 1]. On May 26, 2023, plaintiffs filed a First Amended Complaint bringing the following claims against defendant under the TPLA:

6. Plaintiffs aver that the Defendant, as designers, manufacturers, sellers, and distributors of the subject fluorescent bulb, owed certain duties to the Plaintiffs, which were breached in this instance in the following non-exclusive manner, and Plaintiffs sue the Defendant based on all theories

of liability contained in the [TPLA], T.C.A. § 29-28-101, et seq. Plaintiffs aver that the Defendant designed, manufactured[,] and placed into the stream of commerce the subject bulb, whether by negligence or otherwise, which was either in a defective condition, or unreasonably dangerous at the time it left the Defendant's control, thus rendering Defendant strictly liable to the Plaintiffs. Plaintiffs aver that the subject fluorescent bulb was unsafe for its normal or anticipatable handling, and the subject bulb was dangerous to an extent beyond that which would be contemplated by the ordinary consumer. Further, Defendant failed to warn of the particular hazard which resulted in the subject injury, that is the potential for violent explosion.

- 7. Plaintiffs further aver that, in the normal course, a fluorescent bulb such as the one in question, does not violently explode, as it did in this instance. Accordingly, Defendant is also liable to the Plaintiffs based upon the Common Law Doctrine of *res ipsa loquitur* [sic].
- 8. Further Defendant breached warranties, both express and/or implied as well as that of merchantability and fitness for a particular purpose, all of which again led to Plaintiff's traumatic injuries.

[Doc. 26 ¶¶ 6–8]. The amended complaint attaches a photograph of a fluorescent bulb, with part number F96T12/CWX stamped thereon, which was taken a few days after plaintiff's accident [*Id.* ¶ 4]. Plaintiffs contend that the bulb involved in the accident "was installed by Lloyd's … and part of a batch of bulbs from which other bulbs were stamped part number F96T12/CWX" [*Id.*].

Plaintiff avers that he was exercising appropriate due care for his own safety as he was attempting to remove the fluorescent bulb from its fixture [Id. ¶ 5]. As a direct result of the explosion of the fluorescent bulb, plaintiff claims that he suffered painful, disabling, and permanent injuries for which he has required extensive medical treatment, which will likely continue [Id. ¶ 9]. Specifically, plaintiff claims that he endured a "severe traumatic disruption of tissue, including skin, biceps musculature and biceps tendon from the area of

his left elbow and biceps muscle complex." He claims that he sustained a loss of income and earning capacity. Seeking compensatory damages, plaintiff claims that his injuries and treatment resulted in physical pain, mental suffering, and loss of enjoyment of life [Id.]. Plaintiff Nicole Greene asserts a loss of consortium claim [Id.] 10].

ii. Plaintiffs' disclosure of expert witnesses

On May 26, 2023, plaintiffs disclosed two expert witnesses pursuant to Fed. R. Civ. P. 26(a)(2): Thomas J. Kelly, P.E., MSEE, MBA, CFEI, CESCP, a licensed electrical engineer [Docs. 32-3, pp. 7–52] and Joshua Moss, M.D., an orthopedic surgeon [Doc. 32-4, pp. 16–21]. These experts were disclosed according to the Court's Scheduling Order, as amended [Docs. 16, 21, 24].

Kelly, who is employed as a senior consulting engineer for Warrant Group, Inc., performed an investigation and prepared a report dated May 26, 2023, which plaintiffs then disclosed to defendant on the same date [Doc. 32-3, pp. 7–52]. According to his curriculum vitae attached to the report, Kelly's job duties include "performing specialized consulting related to property damage and injuries involving electrical equipment, devices, wiring, connections, and other related electrical hardware, electrical fires and failures, arc flashes, electrocutions, shocks[,] and other electrical injuries to people, electrical control system engineering, [and] electrical design safety" [*Id.* at 25]. In his previous experience as a facilities manager, Kelly "[m]anaged multi-state manufacturing and office facilities[,] [e]valuated facility conditions for building envelope performance, energy consumption and lighting performance and compliance[,] [d]etermined capital improvement projects and

analyzed energy usage[,] [m]anaged critical data center infrastructure including fire suppression systems and emergency power systems for multiple site locations" [Id. at 26].

During his investigation of this case in January 2023, Kelly "inspected clothing items from the day of the incident that [plaintiff] Greene was wearing," "inspected lamps² recovered from adjacent fixtures at the subject facility," as well as "met with [plaintiff] Greene and inspected, documented, photographed the subject light fixture and facility" [*Id.* at 9]. In addition, Kelly reviewed plaintiff's deposition transcript, the emergency medical services report dated June 11, 2020, the police report dated June 11, 2020, an invoice from Lloyd's dated December 31, 2013, the Safety Data Sheets ("SDS") for Sylvania fluorescent light bulbs, and photographs taken from the scene of the incident [*Id.* at 9–10].

Kelly concluded that "to a reasonable degree of engineering certainty, the failure of the subject lamp was caused by a defect in the fluorescent lamp assembly" [*Id.* at 14]. Kelly reached this conclusion based on the following analysis:

The power to the lamp was turned off via the circuit breaker panel before the process of changing the lamp. This step disconnected the energy source for the light fixture. The incident was not caused by an electrical failure in the building's electrical system.

The subject light fixture contained a single electronic ballast. No battery backup or other stored energy was located in the light fixture. Power to the fixture had been removed via the opening of the related circuit breaker before the process began. [Plaintiff] Greene did not have any observable burn marks on his hands that would indicate contact with an energized source. The subject light fixture was placed back in service after lamps were replaced post incident. The incident was not caused by an electrical failure in the light fixture.

² The experts in this case use the term "lamp" interchangeably with "bulb."

Fluorescent lamps are fabricated with thin glass tubing. A phosphorus coating is applied to the inside of the glass tube. Glass end caps are then fused to the glass at high heat to mount the tungsten filaments within the tube ends. Mercury vapor is inserted into the tube during the final sealing process. A metal cap with the insulator and connecting pin subassembly is crimped to the glass assembly. Each of these steps can add stress to the thin glass components of the lamp assembly. A defect in one of the components can be influenced by these stresses and remain like a primed trigger.

The ladder was placed in a stable position against the wall adjacent to the subject fixture. Based on the recreation of the removal process, the incident was not caused by improper handling of the subject lamp. The multiple pieces of scattered tissue observed on the floor indicate an explosive-type force that caused the damage to [plaintiff] Greene's arm muscle.

As part of that cleanup, the remains of the subject lamp were disposed of as part of the Waste Connection's cleanup. Photos provided of the scene taken immediately after the accident showed the remnants of the exploded 8-foot lamp, including silver-colored end caps. The presence of the silver-colored end caps is consistent with photos provided of other silver end capped bulbs taken at the scene, and three of which burned out bulbs were later removed from the scene. The photos provided were also consistent with the three lamps that were inspected as part of this investigation on January 11, 2023. All of the bulbs were 8-foot, 75-watt Sylvania florescent [sic] tube lamps with part number F96T12/CWX. The remaining intact, burned-out bulbs have the same markings and the same silver colored end caps as the exploded bulbs. Based on the commonality of the intact lamps and the service ticket showing the wholesale replacement of all of the lamps, the exploded bulb was also a Sylvania bulb from that same batch of bulbs that were installed in December 2013.

A review of the SDSs issued before (2008) and after (2017) the subject lamps were installed in 2013 shows no known hazards for a lamp that is intact. Further, the same SDSs only state a warning for a respiratory hazard if a lamp is broken. No specific handling instructions are listed in the SDSs for intact lamps, only after lamps are broken. Normal first aid procedures are the recommended emergency procedure for glass cuts from handling an already broken lamp.

[*Id.* at 12–13].

On May 26, 2023, plaintiffs also disclosed Dr. Moss as plaintiff's treating physician and surgeon from University Orthopedic Surgeons [Doc. 32-4, pp. 2–4, 16–21]. Dr. Moss intended to testify on the following subject matters:

(1) the causation, medical necessity and details of the various evaluations and treatment rendered to [plaintiff] Greene; (2) the impact of the injury on [plaintiff] Greene's physical abilities, functional capacity, permanent impairment, and limitations; (3) [plaintiff] Greene's current condition and potential need for future treatment; and (4) the reasonableness and necessity of the medical bills and expenses associated with the evaluation and treatment of [plaintiff] Greene from June 11, 2020, through the present date.

[Id. at 17]. Dr. Moss opined that "[o]n June 11, 2020, [plaintiff] Greene sustained a serious, painful and debilitating injury to his left arm when a fluorescent light bulb that he was changing exploded, causing immediate tissue disruption and bleeding in the area of the left biceps" [Id.]. Dr. Moss described that "the essence of the injuries sustained by [plaintiff] Greene was a violent and traumatic disruption laceration of skin, fatty tissue and muscle tissue of the left upper arm, resulting in damage to the distal biceps tendon, near complete loss of the left bicep muscle function and approximately 50% loss of the anterior brachialis musculature and function" [Id. at 18].

Dr. Moss explained that plaintiff's first operative procedure on June 15, 2020, "was essentially to perform excisional debridement and irrigation of the devitalized skin, subcutaneous tissue, and muscle associated with a complex laceration near the left anterior elbow" [*Id.*]. As further explained by Dr. Moss, plaintiff's second operative procedure on July 29, 2020, "was essentially to reconstruct the left distal biceps tendon through the use of a cadaver Achilles tendon, which was weaved into the existing tendoness tissue, so as

to help restore flexion of the elbow and pronation/supination of the forearm" [*Id.*]. Based on his experience as an orthopedic surgeon in the military, Dr. Moss planned to testify to the following conclusions:

The history provided by [plaintiff] Greene was that his left arm was injured by an exploding fluorescent lightbulb on June 11, 2020. The injuries sustained by [plaintiff] Greene were consistent with that history as [plaintiff] Greene described. In fact, based on the experience of Dr. Moss having served as an orthopedic surgeon for military personnel, he is expected to testify that the traumatic laceration of tissue from [plaintiff] Greene's left arm was the result of a highly violent force, similar to that experienced by soldiers injured by explosive ordnance or fragmentation devices. This is as opposed to the type of injury that he would expect from [plaintiff] Greene having simply fallen on the bulb.

[Id. at 19–20].

iii. Defendant's dispositive motion

On May 26, 2023, the same day that plaintiffs disclosed their two expert witnesses, defendant filed its motion for summary judgment [Doc. 27]. Defendant maintains that plaintiffs cannot meet their burden of proof due to "the undisputed expert evidence that fluorescent lamps have been proven safe over decades of industry experience and cannot spontaneously explode" [*Id.* at p. 2]. Defendant also points out that plaintiffs have "no physical evidence to show that this particular lamp was defective because no remnants of the lamp were preserved" [*Id.*]. In support, in relevant part, defendant submits the declaration of Dawnelle Sohl, defendant's corporate representative, dated May 23, 2023 [Doc. 27-1]; the declaration of David W. Powell, a mechanical engineer, dated May 22, 2023 [Doc. 27-2]; and the declaration of Erick H. Knox, Ph.D., P.E., a biomedical engineer, dated May 25, 2023 [Doc. 27-6].

As the Head of Quality and familiar with defendant's products, Sohl testified that T12 fluorescent lamps are an "industry standard design" and "based on proven technology" [Doc. 27-1, p. 2]. She stated that "[defendant] and its predecessor have been manufacturing and selling T12 fluorescent lamps since the 1940's under the Sylvania brand name" [*Id.*]. Sohl also provided the following testimony about the fluorescent lamp, model number F96T12/CWX, seen in the photograph attached to plaintiffs' complaint: 1) it was manufactured in Versailles, Kentucky in the 43rd week of 2013; 2) in 2013, defendant employed manufacturing, inspection, and testing processes for this model lamp at its Versailles facility that are consistent with the industry standard ANSI C78.81; 3) defendant has never received a verified customer complaint that a T12 fluorescent lamp "exploded" due to a product failure; and 4) defendant has never issued a recall for this model lamp or any other T12 fluorescent lamp [*Id.* at 3].

Powell, who holds a Bachelor of Science in mechanical engineering, works for SYTEK Consultants [Doc. 27-2, p. 2]. Powell described how the model fluorescent lamp F96T12/CWX is designed and operates: 1) the design for T12 fluorescent lamps is a standard design, which was first introduced for commercial use in 1944 and has been in use continuously since then, throughout the lighting industry [*Id.* at 3]; 2) the lamp is a glass-walled hollow tube that is almost eight feet long and only 1.5 inches in diameter, and the general shape, dimension, and electrical properties of the lamp are controlled by ANSI C78.81 [*Id.*]; and 3) the subject lamp works by filling a hollow glass tube with a very low-pressure mixture of an inert gas (like argon) and mercury vapor, and when electrical

current flows through the low-pressure gas between the electrodes at each end of the fluorescent lamp, the gas inside the tube is ionized and emits ultraviolet radiation, which is converted to visible light as the inside of the tube is coated with phosphors [*Id.* at 3–4].

Powell concluded that "[i]t is [his] opinion to a reasonable degree of scientific certainty that fluorescent lamps like the one at issue in this case cannot explode because they operate under extremely low pressure" [Id. at 3]. Powell explained that 1) because the subject lamp was almost eight feet long and made of glass, it can shatter if it impacts a hard object, is dropped, or is mishandled [Id. at 4]; 2) when a fluorescent lamp fractures, air rushing in to fill the vacuum creates a sharp noise and causes the glass to forcibly disperse; and 3) "[t]o an observer, this phenomenon might appear as if the lamp had exploded." Powell stated that the fact that a fluorescent lamp can break or fracture when dropped, mishandled, or impacted with a foreign object does not make the lamp a defective product. Finally, Powell concluded that "if the subject lamp shattered, it must have done so because it was improperly handled and/or impacted another object that broke the glass tube" [Id.].

Dr. Knox, a biomedical engineer and vice president of Engineering Systems Inc., provided opinions based on his 20 years of experience in ladder accident investigation and reconstruction [Doc. 27-6, pp. 2–4]. According to Dr. Knox, the ladder that plaintiff used at the time of the accident was the fly section of a Louisville Ladder Rhino 20-foot extension ladder, model FE4620HD [*Id.* at 6]. Dr. Knox stated that this section of the ladder was not designed for separate use because it did not have proper feet or shoes to

provide slip resistance and carried an express warning label on it, "CAUTION THIS LADDER SECTION IS NOT DESIGNED FOR SEPARATE USE" [*Id.* at 5, 7]. Dr. Knox explained that the base section, which plaintiff did not have access to because his employer did not make this section available, is designed with a foot, shoe, or other implement to maintain contact with the ground to resist sliding against the support surface and has its own set of warnings and instructions [*Id.* at 4–5, 7–9].

Dr. Knox concluded that plaintiff failed to inspect the ladder, failed to heed the warning, and misused the fly ladder section [Id. at 9]. Dr. Knox noted that "[plaintiff] Greene's testimony and the Tennessee Department of Labor First Report of Injury indicate that the ladder slipped and fell to the ground," and he determined that "[t]he absence of proper feet on the subject [fly] ladder section to resist ladder sliding was a substantial contributing factor in the incident." Finally, Dr. Knox stated that he "understand[s] from reviewing the declarations of David Powell and Dawnelle Sohl that fluorescent lamps such as the one involved in this accident cannot spontaneously explode, but that because they are made of glass tubes, they can break if they impact another hard object or are mishandled" [Id.].

iv. Plaintiffs' response in opposition

On July 5, 2023, plaintiffs filed their response in opposition to defendant's motion for summary judgment [Doc. 32]. In support, in pertinent part, plaintiffs filed excerpts from plaintiff's deposition taken on January 20, 2023 [Doc. 32-1, pp. 2–54]; plaintiff's declaration dated July 3, 2023 [*Id.* at 55–59]; a brief excerpt from Kelly's deposition taken

on June 23, 2023 [Doc. 32-2, pp. 2–6]; Kelly's expert disclosure report dated May 26, 2023 [Doc. 32-3, pp. 7–52]; a declaration from Kelly dated July 3, 2023 [Doc. 32-3, pp. 53–57]; excerpts from Dr. Moss's deposition taken on June 20, 2023 [Doc. 32-4, pp. 2–15]; Dr. Moss's expert disclosure dated May 26, 2023 [Doc. 32-4, pp. 16–24]; and Dr. Moss's curriculum vitae [Doc. 32-4, pp. 22–24]. The details elicited from plaintiff about how the accident occurred, as well as the details contained in the expert disclosures from Kelly and Dr. Moss have been set forth above.

Moving to Kelly's declaration, his opinions are based on "[his] education, training and [his] experience as a professional engineer, electrical engineer, [his] personal knowledge, [his] experience as a facility manager of millions of square feet of commercial and industrial facilities and knowledge of the engineering and other standards applicable to the investigation of the lamp failure incident that occurred at the Waste Connections facility in Lenoir City, TN on June 11, 2020" [Doc. 32-3, p. 54]. Kelly provided the following information and opinions:

- 5. The physical demonstration as presented by [plaintiff] Greene and subsequent description of how he removed the lamp corrected his initial verbal description of the process as recorded in my field notes, where he had the direction of movement to remove the lamp reversed. The direction of movement does not change my opinions expressed about the failure of the lamp.
- 6. The fly section of the ladder used was part of a Type IAA assembly that was rated for a working load of 375 pounds. The fly section would have to support the same weight as the lower section for the entire assembly to be able to support the rated 375 pounds.
- 7. The subject bay of the Waste Connections leased space was used for vehicle and equipment maintenance and repairs. As such[,] various tools and

vehicle parts have been stored and moved within this space. Marks on the walls are as likely to be from parts or tools leaned against the walls as from the ladder striking the wall close to the floor.

[*Id.* at 54–55].

Kelly addressed defendant's alternate hypothesis that the ladder was positioned under the subject light fixture at the time of the incident and explained his reasons for discounting that hypothesis, including that the "missing portion of the broken cover plate" on an electrical outlet cover does "not match the size and orientation of the plastic piece on the floor" [*Id.* at 55]. Kelly further stated:

- 10. Due to the concerns of bloodborne pathogens and the ensuing pandemic at the time of the incident[,] the debris was disposed of as part of the cleanup process and was therefore not available for further evaluation leaving the description of events by [plaintiff] Greene, the only witness at the scene, and the photographs taken after the incident as the primary evidence to consider.
- 11. The National Fire Protection Association 921: Guide for the Fire and Explosion Investigations as addressed during my deposition is a general guideline for the investigation of structure and vehicle fire events and explosions. While the lay description of the event was termed an explosion, the circumstances of the lamp failure do not fit the definition within the 921 Standard. I used the available information of the witness statement and photographic evidence in a manner consistent with consideration of the investigative process outlined in NFPA 921.

[*Id.* at 56]. Kelly also provided opinions on the SDS, included in Appendix IV of his report, for the subject light bulb:

14. Given the lack of warnings contained within the SDS and on the subject lamp, [plaintiff] Greene would not have been made aware of the severity of the hazard associated with the failed subject lamp, i.e., in the manner in which the subject lamp imploded and forcibly ejected glass fragments and components resulting in [plaintiff] Greene's injury.... Given the lack of warnings in the SDS and the absence of warnings on the lamp, [defendant] failed to provide adequate warnings for this product.

15. The opinions and conclusions presented in this declaration as well as my engineering report dated May 26, 2023, are and/or remain my opinions within a reasonable degree of engineering certainty, including but not limited to, a defect in the subject Sylvania F96T12/CWX lamp assembly caused [plaintiff] Greene's injury.

[*Id.* at 56–57].

v. Defendant's reply

On July 12, 2023, defendant filed its reply [Doc. 36] to plaintiffs' response, focusing first on the deposition testimony of plaintiffs' two expert witnesses. In his deposition taken on June 23, 2023, Kelly acknowledged that he does not hold himself out as an accident reconstruction expert or human factors engineer [Doc. 36-2, pp. 1–2]. Kelly also testified that he performed no testing to confirm his hypothesis that there was a defect in the subject lamp [*Id.* at 11–12]. In response to the question, "There's no evidence that there was a defect in the Sylvania T12 eight foot lamp at issue in this case[,] [t]rue?," Kelly answered "That can't be evaluated because it was thrown away." [*Id.* at 12]. Kelly also agreed that he did not test the exemplar lamps that were on site at the facility [*Id.*]. Finally, Kelly explained that he could not locate any documented literature that would indicate that Sylvania T12 eight-foot lamps spontaneously shatter [*Id.* at 10–11].

At Dr. Moss's deposition taken on June 20, 2023, the doctor testified that the hospital records showed that plaintiff gave the following information to Dr. Seaworth about how the accident occurred: "According to [Dr. Seaworth's] document, [plaintiff] stated that he suffered an injury to his left upper extremity while removing an eight-foot long fluorescent lightbulb. He reported that this was from standing on the floor without a stool

or a ladder. Not exactly sure what happened. Reports there is scant blood loss from his left arm, 500 cc's at the scene" [Doc. 36-3, pp. 2–3]. Dr. Moss recognized that he is not an expert on fluorescent lamps and has no training in accident reconstruction [Id. at 1, 5, 8]. Dr. Moss stated that he has no experience in or opinions about the design or manufacture of fluorescent lamps [Id. at 4, 8]. Further, Dr. Moss testified that he does not know if there are any internal components inside a fluorescent lamp that are capable of creating an explosion [Id. at 5]. Dr. Moss agreed that he did not perform any experiments to determine whether glass can be propelled from a fluorescent lamp by striking it on an object and shattering it [Id. at 5–6].

Next, defendant's reply [Doc. 36] centers on its two experts: Dr. Knox, who submitted a second declaration dated July 11, 2023 [Doc. 36-4, p. 1] and investigative report dated July 6, 2023 [*Id.* at 2–52], and Powell, who submitted a second declaration dated July 11, 2023 [Doc. 36-5, p. 1] and expert report dated July 7, 2023 [*Id.* at 2–41].

In Dr. Knox's investigative report, he posited three possible causes of plaintiff's accident, including that 1) plaintiff "may have inadvertently mishandled the lamp while still at height on the ladder, causing both a loss of balance and breakage of the lamp," 2) he "may have felt the ladder starting to slide, which caused him to mishandle the lamp and break it," or 3) he "may also have slid with the ladder and ultimately impacted the ground, whereupon that impact caused the lamp to break" [Doc. 36-4, p. 34]. Dr. Knox determined that plaintiff failed to inspect the ladder for proper feet, that plaintiff failed to heed the warning that the fly ladder section was not designed for separate use, and that plaintiff

misused the fly ladder section [Doc. 36-4, p. 37]. Dr. Knox concluded that the absence of proper feet on the ladder was "a substantial contributing factor in the incident" and that plaintiff's "actions in the set up and use of the subject ladder were the cause of his incident" [*Id.*].

Powell generated an expert report which reiterated his "opinion to a reasonable degree of scientific certainty that fluorescent lamps like the one at issue in this case cannot explode because they operate under extremely low pressure" [Doc. 36-5, p. 17]. Powell further opined that "[t]he incident lamp did not explode while [plaintiff] Greene was handling it," rather "[t]he lamp may have shattered while being removed and handled by [him]" [Id. at 18]. Powell also determined there were several potentially valid hypotheses as to why the subject lamp fractured, including 1) "[t]he 8-foot lamp was fractured by hitting the wall or the fixture while being removed or handled by [plaintiff] Greene," 2) "[t]he lamp was scratched or damaged prior to [plaintiff] Greene's removing and handling of the lamp resulting in the lamp fracturing upon handling it," 3) "[plaintiff] Greene fell and dropped the lamp, resulting in the lamp shattering," or 4) "[plaintiff] Greene fell and impaled himself on the lamp" [Id. at 19]. Powell stated that "[n]one of these hypotheses are inconsistent with the opinions expressed by Dr. Knox in his report" [Id.].

vi. Plaintiffs' supplemental response and defendant's response

On November 14, 2023, plaintiffs filed a supplemental response [Doc. 54] in opposition to defendant's motion for summary judgment and motion to exclude Kelly as an expert witness; the latter motion will be explained *infra*. In support of their

supplemental response, plaintiffs incorporate excerpts from Sohl's deposition, which was taken on August 11, 2023 [Doc. 54-1, pp. 1–14]. Specifically, Sohl testified that defendant no longer makes the T12 fluorescent lamps, with their final plant closing in the United States in 2019, that being Versailles, Kentucky [*Id.* at 6]. Sohl identified the photograph of the fluorescent lamp attached to plaintiffs' complaint, as well as the other three fluorescent lamps from the scene of plaintiff's accident as bearing markings that designate them as being manufactured at the Versailles plant during the 43rd week of 2013 [*Id.* at 7].

Sohl also testified that she does not have any indication that fluorescent lamps can ever explode, and she stated that defendant has never had any record of "a lamp even in operation and manufacturing that it has exploded[,] [s]o [she did not] believe that it exploded" [Id. at 9]. Sohl acknowledged that the fluorescent bulb is very long and made of glass so it can break, including during the removal of the lamp [Id.]. Sohl stated that defendant does not have data showing the speed at which glass fragments expel when a breakage occurs, nor does it have any documentation as to the effect of those glass fragments resulting from a break [Id. at 8]. Because of the closure of the factory, Sohl stated that defendant does not have any records concerning quality testing or sampling of the lamps [Id. at 10]. Sohl agreed that there would be a percentage of fluorescent lamps that go out into the stream of commerce that may end up failing for one reason or another, and because of that, defendant offers a warranty [Id. at 10]. Finally, Sohl explained that one type of defect in a fluorescent lamp can be an "outer bulb wall crack," which would be a manufacturing defect [Id. at 14]. Plaintiffs' supplemental response also refers to Sohl's

testimony to the effect that "there was nothing contained either in the SDS or anywhere else concerning the phenomenon of the implosion and expulsion of glass fragments when a bulb break or fractures" and that "there were no explicit warnings except that it is glass and you can get cut from it, but there were no explicit warnings regarding implosion or expulsion of glass [Doc. 54, p. 4 (citing Sohl deposition, p. 53)].

On November 15, 2023, defendants filed a response [Doc. 55] to plaintiffs' supplemental response.³ Citing to Sohl's deposition testimony in which she clarified that if a fluorescent lamp has a crack as a manufacturing defect, which is a "failure mode of the lamp," defendant argues that this means the lamp could not operate [Doc. 55-1, pp. 4–5]. In addition, defendant points to Sohl's testimony that every fluorescent lamp was energized at an automatic light-up station before going to the packing station [*Id.* at 3]. Defendant also filed a third declaration of Powell, which is dated November 15, 2023 [Doc. 55-2, pp. 2–4]. Powell explained how a cracked fluorescent lamp cannot operate: "[a] crack in the very thin glass wall of the fluorescent tube will result in the ingress of external ambient air to enter the tube causing the lamp to quickly become non-operational" [*Id.* at 4]. Powell also stated that photographs of the darkened end of the subject lamp indicate that it "operated properly for a long period of time, likely more than 10,000 hours" [*Id.*].

³ Defendant objects to plaintiffs' supplemental response as untimely under E.D. Tenn. L.R. 7.1(d), alerting the Court that plaintiffs waited three months to raise Sohl's August 2023 deposition testimony and filed the response just two days before a hearing on the motion to exclude Kelly [Doc. 55, pp. 1–2]. Defendant defers to the Court's judgment as to whether to consider plaintiffs' response as untimely [*Id.* at 2]. Exercising its discretion, the Court considers the information in the interests of justice and judicial economy.

Therefore, Powell concluded that "[t]he theory that a crack in the lamp's glass was created or existed at the time of manufacture of the lamp is contradicted by the long successful operation of the lamp in its light fixture up until the moment the lamp was handled by [plaintiff] Greene" [Id.].

vii. Exclusion of plaintiffs' experts

On November 16, 2023, United States Magistrate Judge Jill E. McCook conducted a *Daubert* hearing [Doc. 56]. The purpose of this hearing was to address defendant's "Motion to Strike the Declaration of Thomas J. Kelly, P.E." [Doc. 34] filed on July 11, 2023, and defendant's "Motion to Exclude Testimony of Plaintiff's Expert Witness, Thomas Kelly" [Doc. 41] filed on July 26, 2023. At the hearing, Judge McCook heard live testimony from Kelly [Doc. 57] and considered his deposition testimony attached to defendant's motion to exclude [Doc. 41-3].

On December 13, 2023, based on the positions of the parties and the evidence in the case, the magistrate judge issued a Memorandum and Order [Doc. 61], in which she granted defendant's motion to exclude and granted in part and denied in part defendant's motion to strike. Regarding the motion to exclude, Judge McCook concluded:

The Court finds that Kelly's opinion that the incident was not caused by improper handling is unreliable and therefore inadmissible. The Court finds that Kelly is not qualified, and ... his method is not reliable, to render his opinion that the incident was caused by a defect in the fluorescent light bulb assembly. The Court further finds that Kelly is not qualified to render his opinion on warnings and that his opinion regarding the cleanup process is speculative.

[*Id.* at 15]. As to Kelly's opinion that a manufacturing defect caused the incident, Judge McCook elaborated:

Kelly acknowledged at the *Daubert* hearing, and during his deposition, that his only familiarity with the manufacturing process of a fluorescent light bulb comes from watching a video years before this litigation [See Doc. 41-3 p. 13]. He also testified that he has never designed a fluorescent light bulb, he has never manufactured a fluorescent light bulb, and he has never published any literature about the proper manufacturing of a fluorescent light bulb. The Court finds that Plaintiffs have not met their burden in establishing that Kelly is qualified to render his opinion that a manufacturing defect caused the incident....

But even if Kelly were qualified to offer an opinion on a design defect of the subject light bulb, the Court finds that his methodology is unreliable and is not based on sufficient facts and data. *See* Fed. R. Evid. 702.

Here, Kelly explained that in order to arrive at his conclusions, he read Plaintiff Greene's deposition transcript, discussed the incident with him, and ruled out other causes.... Kelly testified that he had three exemplars, but he did not perform any testing on these exemplars, including any residual testing, despite testifying in his deposition that he had used the scientific method, which requires testing of a hypothesis [Doc. 41-3 p. 4].... And he attempted to find literature to support his hypothesis, but he was unsuccessful.

[*Id.* at 19–21 (footnote omitted)]. In summary, Judge McCook ruled that "Kelly's methodology was neither reliable nor based on sufficient facts, and the Court finds his opinion that the light bulb had a manufacturing [defect] inadmissible" [*Id.* at 21].

As to the motion to strike, the magistrate judge found that the following three opinions from Kelly are proper rebuttal testimony to Dr. Knox's opinions about the ladder and declined to strike them: "(1) certain black marks on the wall are as likely to be from other sources [as] from the ladder [Plaintiff] Greene was using, (2) a plastic piece on the

floor does not match the missing portion of an electrical outlet cover, and (3) certain NFPA guidelines do not apply to this case" [*Id.* at 24, citing Doc. 46, p. 1]. However, under Fed. R. Civ. P. 37, Judge McCook excluded Kelly's new opinion that "[Defendant] failed to warn that if broken, a fluorescent lamp can implode, dispersing glass fragments" because it was untimely under the Court's Scheduling Order [*Id.*].

At the hearing on November 16, 2023, the magistrate judge also heard defendant's "Motion to Exclude Certain Limited Testimony of Plaintiff's Expert Witness, Joshua Moss, M.D." [Doc. 43] filed on July 26, 2023. Judge McCook issued a Memorandum and Order [Doc. 60], in which she outlined the parameters of defendant's motion to exclude Dr. Moss:

At the hearing, Defendant clarified that it is not challenging Dr. Moss's opinion that Plaintiff Greene's injury is similar to what he saw on the battlefield or that Plaintiff Greene's injuries were from glass. Defendant also stated that it was less concerned about Dr. Moss's testimony that the injuries were consistent with a 'highly violative force.' But Defendant argued that Dr. Moss should be precluded from testifying that Plaintiff Greene was injured by an exploding or imploding light bulb.

[*Id*. at 4].

⁴ Defendant specified in its motion to exclude Dr. Moss that it does not seek to exclude the doctor from testifying about the medical care he provided to plaintiff or the injuries he personally observed [Doc. 43, p. 1]. The motion also does not attempt to exclude Dr. Moss from testifying that he observed injuries like those suffered by plaintiff during his time as an orthopedic surgeon in the United States Navy [*Id.*]. Instead, the motion "only asks the Court to preclude Dr. Moss from offering any opinions about the fluorescent lamp at issue or the way broken glass from that lamp may have injured [plaintiff] Greene" [*Id.*]. Defendant also moved to "exclude Dr. Moss's proposed testimony that [plaintiff] Greene's arm injury was caused by an explosion or that based on Dr. Moss's experience having served as an orthopedic surgeon for military personnel, 'the traumatic laceration of tissue from [plaintiff] Greene's left arm was the result of a highly violent force, similar to that experienced by soldiers injured by explosive ordnance or fragmentation devices" [*Id.* at 2].

In granting defendant's motion to exclude, Judge McCook concluded that "Dr. Moss may not offer any opinions about the fluorescent lamp at issue or the way broken glass from that lamp may have injured Plaintiff" [*Id.* at 7]. In reaching this decision, Judge McCook considered Dr. Moss's deposition testimony from June 20, 2023, in which he testified that he is not an expert on fluorescent light bulbs, he did not perform any investigation of the accident to determine that the light bulb exploded, and he conceded that he could not rule out alternative causes for plaintiff's injuries [*Id.* (citing Doc. 49-1, pp. 7, 27)].

Plaintiffs did not timely appeal the magistrate judge's decisions to exclude certain expert opinions of Kelly and Dr. Moss, and therefore, Judge McCook's determinations stand as ordered. *See* Fed. R. Civ. P. 72(a); 28 U.S.C. § 636(b)(1)(A).

II. Standard of Review

Rule 56(a) of the Federal Rules of Civil Procedure provides that "[t]he court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." In ruling on a motion for summary judgment, the Court must view the factual evidence and draw all reasonable inferences in favor of the nonmoving party. *McLean v. 988011 Ontario, Ltd.*, 224 F.3d 797, 800 (6th Cir. 2000). As such, the moving party has the initial burden of informing the Court of the basis for its motion and identifying portions of the record that demonstrate the absence of a genuine dispute over material facts. *Rodgers v. Banks*, 344 F.3d 587, 595 (6th Cir. 2003). The moving party may satisfy this burden by presenting

affirmative evidence that negates an element of the nonmoving party's claim or by demonstrating an absence of evidence to support the nonmoving party's case. *Id.* To successfully oppose a motion for summary judgment, "[t]he non-moving party . . . must present sufficient evidence from which a jury could reasonably find for him." *Jones v. Muskegon Cnty.*, 625 F.3d 935, 940 (6th Cir. 2010) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986)).

III. Analysis

A. The TPLA

Product liability suits in Tennessee are governed by the TPLA, which provides that "[a] manufacturer or seller of a product shall not be liable for any injury to a person ... caused by a product unless the product is determined to be in a defective condition or unreasonably dangerous at the time it left the control of the manufacturer or seller." Tenn. Code Ann. § 29-28-105(a). In this case, plaintiffs bring claims of strict liability, negligence, failure to warn, and breach of warranty, which are subsumed by the TPLA regardless of the substantive theory of recovery. *See Strayhorn v. Wyeth Pharm., Inc.*, 882 F. Supp. 2d 1020, 1028 (W.D. Tenn. 2012) (finding that the TPLA's definition of "product liability action" was "cast so expansively as to cover claims related to a defective product under legal theories of many kinds, whether sounding in negligence, misrepresentation, or breach of warranty").

When sitting in diversity, the Sixth Circuit has set forth the requirements to establish a prima facie products liability case — "the plaintiff must show: (1) the product was

defective and/or unreasonably dangerous, (2) the defect existed at the time the product left the manufacturer's control, and (3) the plaintiff's injury was proximately caused by the defective product." Sigler v. Am. Honda Motor Co., 532 F.3d 469, 483 (6th Cir. 2008) (citing King v. Danek Med., 37 S.W.3d 429, 435 (Tenn. Ct. App. 2000)). "Defective conditions" and "unreasonably dangerous conditions" are alternatives, so a plaintiff may rely on either or both to satisfy the first prong. See Fulton v. Pfizer Hosp. Prods. Grp., Inc., 872 S.W.2d 908, 911 n.1 (Tenn. Ct. App. 1993) (explaining that Tennessee courts interpret the TPLA in the disjunctive in that a plaintiff must prove that a product was either defective or unreasonably dangerous to prevail).

"[A] plaintiff may demonstrate that a product was defective or unreasonably dangerous through direct evidence, circumstantial evidence, or a combination." *Sigler*, 532 F.3d at 483; *see also Browder v. Pettigrew*, 541 S.W.2d 402, 405 (Tenn. 1976). In all product liability actions, "[a] plaintiff must show that there was something wrong with the product ... and trace the plaintiff's injury to the specific defect." *King*, 37 S.W.3d at 435 (citations omitted). Moreover, "[t]he general rule in Tennessee is that the issue of whether a product is defective or unreasonably dangerous is one for the jury." *Curtis ex rel. Curtis v. Universal Match Corp., Inc.*, 778 F. Supp. 1421, 1427 (E.D. Tenn. 1991) (citing *Jackson v. Tenn. Valley Auth.*, 415 F. Supp. 1050, 1058 (M.D. Tenn. 1976)).

B. Defective condition

Under the TPLA, a product in a "[d]efective condition" means "a condition of a product that renders it unsafe for normal or anticipatable handling and consumption."

Tenn. Code Ann. § 29-28-102(2). To establish a defective condition, a plaintiff must identify a "specific error in construction or design of the [product]." *Fulton*, 872 S.W.2d at 912 (quoting *Browder*, 541 S.W.2d at 404). "[F]actors to consider in assessing a product's defectiveness include technology, knowledge, customary designs, etc., of similar products at the time of manufacture" as well as "consumer knowledge about the risks inherent in the use of a product[.]" *Silver v. Nat'l Presto Indus., Inc.*, 884 F.2d 1393, 1989 WL 106290 (Table), at *4 (6th Cir. Sept. 15, 1989) (citations omitted). "It is not required that [a product's] design be perfect, or render the product accident proof or incapable of causing injury." *Curtis*, 778 F. Supp. at 1430.

Defendant maintains that plaintiffs cannot prove that the subject fluorescent lamp was defectively designed or defectively manufactured because "the undisputed expert evidence is that fluorescent lamps cannot spontaneously explode" [Doc. 28, pp. 13–15]. In support, defendant relies on evidence obtained from Sohl and Powell, who demonstrate that the fluorescent lamp at issue is an industry standard design based on proven technology that has been sold commercially for over 75 years and that such lamps cannot violently explode because they operate at extremely low pressure [*Id.* at 14]. Defendant further argues that, according to Powell, such lamps can break if they impact another hard surface or are otherwise improperly used or mishandled because they are made with glass tubes, and a shattered lamp may appear to an observer to have exploded because air rushes in to fill that vacuum and forcibly discharges pieces of the glass tube [*Id.*].

Considering all of the evidence obtained from plaintiff himself, Kelly, Dr. Moss, Powell, and Sohl, plaintiffs defend that the record is replete with disputes of material fact [Doc. 32, p. 8]. Specifically, plaintiffs argue that they have demonstrated a question of material fact as to whether the subject fluorescent bulb was defective and failed in ordinary use [*Id.* at 12]. In response to defendant's claim that there is no proof of a defect because the subject bulb cannot spontaneously explode or explode at all, plaintiffs clarify that they do not claim there was a spontaneous explosion of the bulb but rather it popped and exploded during plaintiff's removal of the bulb from the fixture in a normal and routine way, during which plaintiff did not strike the bulb on any other object and he did not crush, drop, or fall on the bulb [*Id.* at 13].

In addition, plaintiffs point out that while Powell testified that fluorescent lamps like the one at issue cannot explode because they operate under extremely low pressure, Powell also stated the following:

When a fluorescent lamp fractures, air will immediately rush in to fill the near vacuum that was inside the lamp. The air rushing in to fill the vacuum can create a sharp noise and result in fragments of the glass tube to disperse forcibly. To an observer, this phenomenon might appear as if the lamp had exploded.... Thus, if the subject lamp shattered, it must have done so because it was improperly handled and/or impacted another object that broke the glass tube.

[Id. at 15–16 (quoting Doc. 27-2 ¶¶ 17–18)]. Plaintiffs assert that Powell's opinions are "directly contradicted" by plaintiff's testimony as the only witness to the incident that he turned off the power at the switch and breaker box and did not improperly handle the fluorescent bulb, which popped and exploded immediately after he removed it from the

fixture, "leading to the conclusion that there was a defect in the bulb itself that allowed it to break or fracture during the normal course of being removed from the fixture" [*Id.* at 8, 13, 16].

Further, plaintiffs argue that Kelly drew the same conclusion when he found, to a reasonable degree of engineering certainty, that plaintiff's injuries were caused by a defect in the fluorescent light assembly after Kelly conducted a detailed investigation and eliminated other potential causes of the bulb's failure [Id. at 16–17]. Plaintiffs also assert that an explosion of the fluorescent bulb is in keeping with the independent testimony of Dr. Moss, who determined that plaintiff's injuries were consistent with the history plaintiff described of an injury to his left arm by an exploding fluorescent bulb on June 11, 2020 [Id. at 16]. As further argued by plaintiffs, Dr. Moss, based upon his experience serving as an orthopedic surgeon for military personnel, opined that the traumatic laceration of tissue from plaintiff's left arm was the result of a highly violent force, similar to that experienced by soldiers injured by explosive ordnance or fragmentation devices, as opposed to the type of injury he would expect from plaintiff having simply fallen on the bulb [Id.]. Finally, plaintiffs point to corporate representative Sohl's testimony that defendant has never received a "verified complaint" of a T12 fluorescent bulb exploding due to a product failure [Id. at 15]. Plaintiffs argue this creates a question of material fact because she "does not unequivocally state that [defendant] received no complaints of a lamp exploding due to product failure" and "whether the defendant has had a similar

complaint in the past does not preclude the fact that one is being made by [plaintiff] Greene in this case" [Id.].

In its reply brief, defendant cites to *Pride v. BIC Corp.*, 218 F.3d 566, 580–81 (6th Cir. 2000) for the proposition that Tennessee law requires expert testimony to establish liability in cases alleging manufacturing and design defects [Doc. 36, pp. 2–3, 6–7]. Defendant argues that Kelly admitted he performed no testing to confirm his opinion that there was a defect in the fluorescent light assembly, and further, that he could not evaluate whether there was in fact a defect in the bulb because it was thrown away [*Id.* at 3–4]. Next, defendant points out that Dr. Moss, who admittedly is not an expert in fluorescent lamps, conceded that he could not identify any component of a fluorescent lamp that could cause an explosion [*Id.* at 4–5]. Defendant further argues that plaintiff's "claims about what he did or did not do on the day of the incident do not establish that there was a specific manufacturing or design defect in the subject lamp" [*Id.* at 6–7].

As a preliminary matter, given the procedural history discussed above, the Court observes that the parties' arguments are intertwined with evidence obtained from plaintiffs' experts, Kelly and Dr. Moss. At this juncture, Judge McCook has ruled that Kelly is excluded from testifying that the incident was not caused by improper handling, Kelly is excluded from testifying that the incident was caused by a defect in the fluorescent light bulb assembly, and Kelly is excluded from testifying that defendant failed to warn that if broken, a fluorescent lamp can implode, dispersing glass fragments [Doc. 61]. Further, Judge McCook has determined that Dr. Moss is excluded from offering any opinions about

the fluorescent lamp at issue or the way broken glass from that lamp may have injured plaintiff [Doc. 60]. As noted earlier, without a timely appeal, plaintiffs are bound by the magistrate judge's decisions. *See* Fed. R. Civ. P. 72(a); 28 U.S.C. § 636(b)(1)(A).

Based upon defendant's contention that Tennessee law requires expert testimony to prove a manufacturing and design defect under *Pride*, and in light of Judge McCook's decisions to exclude plaintiffs' expert witnesses in certain respects, it may appear that the Court's analysis would begin and end there. On this critical point, however, the Court finds the Sixth Circuit's decision in *Bradley v. Ameristep, Inc.*, 800 F.3d 205 (6th Cir. 2015), to be controlling.⁵

In *Bradley*, the Sixth Circuit reversed the district court's grant of summary judgment in a products liability action involving treestand ratchet straps, concluding: "Because the district court abused its discretion in ruling that [the plaintiffs' expert] was unqualified, its dismissal of the product defect claims must be reversed. But the district court's account of the controlling Tennessee law on the necessity of expert testimony was also erroneous, and this error provides a separate and independent ground for reversal." *Id.* at 209. In explaining its decision, the appellate court elaborated:

In *Pride*, a plaintiff argued that a defective designed cigarette lighter started a fire that killed her husband. 218 F.3d at 579–80. This court ruled that, "Pride's experts failed timely to present admissible evidence either that the lighter was the proximate cause of Mr. Pride's injuries, or that the presence of a snuffer cap or other redundant safety device could have prevented the

⁵ Defendant only cited to the *Bradley* case in its reply brief in the context of addressing plaintiffs' failure to warn claim [see Doc. 36, pp. 10–11], failing to draw attention to how the central holding in *Bradley* applies to plaintiffs' claim that the fluorescent bulb was defective. Plaintiffs also neglected to address the importance of *Bradley* in any of their filings.

accident." *Id.* at 580. We went on to say that, "Because Pride failed to introduce admissible evidence that the lighter caused the fire that killed Mr. Pride ... the district court properly determined that BIC was entitled to summary judgment on both the manufacturing and design defect claims raised in Pride's complaint." *Id.*

This reasoning—that Pride's claim failed as a matter of law because she had no admissible evidence of causation—was sufficient to decide that case. However, we also explained that "under Tennessee law, expert testimony is required to establish liability in cases alleging manufacturing and design defects." *Id.* (citing *Fulton v. Pfizer Hosp. Prods. Grp., Inc.*, 872 S.W.2d 908, 912 (Tenn. Ct. App. 1993), and *Browder v. Pettigrew*, 541 S.W.2d 402, 404 (Tenn. 1976)). Setting aside the fact that this statement is arguably dicta and therefore not binding precedent, it is not clear that this is an accurate statement of Tennessee law. While both of the Tennessee cases cited by *Pride* refer to the need to "trace the injury to some specific error in construction or design of the product," *Fulton*, 872 S.W.2d at 912 (alteration marks omitted) (quoting *Browder*, 541 S.W.2d at 404), neither case requires that specific error to be identified by expert testimony. **Subsequent language in** *Browder* cuts against the notion that a successful products liability claim requires expert testimony:

A product is defective if it is not fit for the ordinary purposes for which such articles are sold and used.... Establishing this element requires only proof, in a general sense and as understood by a layman, that "something was wrong" with the product. As a rule the mere occurrence of an accident is not sufficient to establish that the product was not fit for ordinary purposes. However, additional circumstantial evidence, such as proof of proper use, handling or operation of the product and the nature of the malfunction, may be enough to satisfy the requirement that something was wrong with it.... Further, a defective condition can also be proven by the testimony of an expert who has examined the product or who offers an opinion on the products design.

541 S.W.2d at 405–06 (quoting Scanlon v. Gen. Motors Corp., 65 N.J. 582, 326 A.2d 673, 677–78 (1974)). The implication of the above passage is that, contrary to the dicta in *Pride* which purported to rely on *Browder*, expert testimony is not the only way to prove a claim that a consumer product was defectively designed or manufactured.

Id. at 210 (footnote omitted) (emphasis added).

Against this legal backdrop, the Court must view the evidence in the record in the light most favorable to plaintiffs as the nonmoving party. First, plaintiff testified that the fluorescent bulb popped and exploded while he was removing the bulb from its fixture in a normal and routine way [Doc. 32-1, pp. 57–58]. Plaintiff explained that he did not strike the bulb on any other object, and he did not crush, drop, or fall on the bulb [*Id.*]. Plaintiff also testified that he is familiar with the need to be careful to avoid striking the bulb or otherwise handling the bulb in such a way that the glass would break [*Id.* at 23, 57]. While familiar with the fact that a fluorescent glass tube bulb might break if fallen upon or struck upon another object, plaintiff stated that he "never expected that during normal handling, such a bulb could or would implode and then forcibly disperse glass in a manner that looked and felt like an explosion, and could cause the type of injury that [he] sustained" [*Id.* at 57]. Further, plaintiff stated that he was as careful as he could be on the date of the incident [*Id.* at 23–24].

Powell testified about what occurs when a fluorescent lamp fractures, explaining that "[t]he air rushing in to fill the vacuum can create a sharp noise and result in fragments of the glass tube to disperse forcibly" [Doc. 27-2, p. 4]. Powell explained that "[t]o an observer, this phenomenon might appear as if the lamp had exploded." Powell then concluded "if the subject lamp shattered, it must have done so because it was improperly handled and/or impacted another object that broke the glass tube" [Id.]. Powell also opined that "[t]he incident lamp did not explode while [plaintiff] Greene was handling it," rather

"[t]he lamp may have shattered while being removed and handled by [him]" [Doc. 36-5, p. 18].

Finding several potentially valid hypotheses as to why the subject lamp fractured, Powell offered: 1) "[t]he 8-foot lamp was fractured by hitting the wall or the fixture while being removed or handled by [plaintiff] Greene," 2) "[t]he lamp was scratched or damaged prior to [plaintiff] Greene's removing and handling of the lamp resulting in the lamp fracturing upon handling it," 3) "[plaintiff] Greene fell and dropped the lamp, resulting in the lamp shattering," or 4) "[plaintiff] Greene fell and impaled himself on the lamp" [Id. at 19]. Additionally, Dr. Knox testified that 1) plaintiff "may have inadvertently mishandled the lamp while still at height on the ladder, causing both a loss of balance and breakage of the lamp," 2) he "may have felt the ladder starting to slide, which caused him to mishandle the lamp and break it," or 3) he "may have also slid with the ladder and ultimately impacted the ground, whereupon that impact caused the lamp to break" [Doc. 36-4, p. 34]. All of this evidence from Powell and Dr. Knox contradicts plaintiff's testimony that he was careful and handled the fluorescent bulb in a normal, routine way.

Moving to plaintiffs' expert testimony which is admissible, Dr. Moss described plaintiff's injury to his left arm as a "violent and traumatic disruption laceration of skin, fatty tissue and muscle tissue of the left upper arm, resulting in damage to the distal biceps tendon, near complete loss of the left bicep muscle function and approximately 50% loss of the anterior brachialis musculature and function" [Doc. 32-4, p. 18]. While Judge McCook ruled that Dr. Moss cannot offer "opinions about the fluorescent lamp or the way

broken glass from that lamp may have injured Plaintiff," defendant clarified in its motion to exclude and at the *Daubert* hearing that it was not challenging Dr. Moss's opinion that plaintiff's injury is similar to what he saw on the battlefield or that his injuries were from glass, and further defendant stated that it was less concerned about Dr. Moss's testimony that plaintiff's injuries were consistent with a "highly violative force" [see Doc. 60, pp. 4, 7].

The Court discerns that Judge McCook's ruling does not encompass the clarifications made by defendant at the hearing as defendant did not object to those portions of Dr. Moss's testimony. Because defendant's concessions were no longer an objection before Judge McCook for her consideration, the Court does not interpret her ruling as contemplating such concessions. Furthermore, Dr. Moss's allowable testimony is buttressed by photographs of the scene of the accident which show close-up shots of "blob[s] of flesh or muscle" from plaintiff's arm and multiple bloody areas on the ground inside and outside of the facility, as well as a photograph of the top of plaintiff's head with a laceration requiring multiple stitches [Doc. 32-1, pp. 52–53; Doc. 32-5, pp. 21–22, 27–34; Doc. 36-1, pp. 14–15].

In keeping with *Bradley*, the Court finds that viewing the totality of the evidence in the light most favorable to the nonmoving party, plaintiffs have submitted admissible evidence from various sources that creates genuine issues of material fact as to whether the fluorescent bulb was in a defective condition, i.e., that "something was wrong" with the bulb "in a general sense and as understood by a layman." *See Bradley*, 800 F.3d at 210

(quoting *Browder*, 541 S.W.2d at 405–06). The reasoning of *Bradley* applies to the instant case in that plaintiffs are not required to produce expert testimony as to a specific error but rather can rely on "circumstantial evidence, such as proof of proper use, handling or operation of the product and the nature of the malfunction." *See id*.

Here, plaintiff's careful handling and proper use of the bulb must be accepted as true in the face of Powell and Dr. Knox's contradictory opinions that plaintiff did not do so. The opinions of defendant's experts hinge on the contention that plaintiff mishandled the bulb in some manner. Powell and Dr. Knox surmise that plaintiff hit the bulb against the wall, or he dropped it, or he impaled himself after dropping it when he slipped and fell off the ladder, but plaintiff also denies slipping off the ladder. The variety of possibilities offered by the defense experts demonstrates that a jury should make its own credibility determinations. In essence, the conflict between plaintiff saying the fluorescent bulb violently exploded when he properly handled it and defense experts saying the bulb merely shattered when he mishandled it goes to the heart of the matter, and this genuine material dispute is to be resolved by a jury. Further, the nature of the malfunction further supports finding a genuine dispute. The fluorescent bulb popped and exploded in a manner that plaintiff never expected based on his prior experience, but in a phenomenon acknowledged by Powell wherein glass can forcibly disperse, with plaintiff sustaining injuries so extensive that pieces of his flesh were torn off from a highly violative force, as stated by Dr. Moss.

Having established that genuine issues of material fact exist as to plaintiffs' claim that the fluorescent bulb was in a dangerous condition, the Court moves to the remaining two elements necessary to establish a prima facie case. That is, whether the defect existed at the time the product left the manufacturer's control, and whether the plaintiff's injury was proximately caused by the defective product. *Sigler*, 532 F.3d at 483 (citing *King*, 37 S.W.3d at 435). The Court will address the causation element first.

Here, Dr. Moss plans to testify on the issue of causation, including the medical necessity and details of evaluations and treatments rendered to plaintiff because of his injuries that were consistent with a highly violative force⁶ [Doc. 32-4, p. 17]. Dr. Moss is also expected to testify about the history provided to him by plaintiff, and this includes the fact that plaintiff was injured while changing a fluorescent bulb at work. Further, Dr. Moss is expected to describe that plaintiff sustained a "violent and traumatic disruption laceration" of skin and muscle of the left arm, with damage to the biceps tendon, near complete loss of the bicep muscle function, and approximately 50% loss of the brachialis musculature and function [*Id.* at 18–19]. It is undisputed that the fluorescent bulb made of glass cut plaintiff, according to Dr. Moss. Indeed, close-up photographs reveal pieces of flesh torn from plaintiff's left arm and a laceration on the top of his head [Doc. 32-1, pp. 52–53; Doc. 32-5, pp. 21–22, 27–34; Doc. 36-1, pp. 14–15]. Accordingly, considering this evidence in the light most favorable to plaintiffs, genuine issues of material fact exist

⁶ As noted above, defendant is not concerned with Dr. Moss's testimony that plaintiff's injuries were consistent with a "highly violative force," that plaintiff's injury is similar to what he saw on the battlefield, and that plaintiff's injuries were from glass [see Doc. 60, p. 4].

as to whether plaintiff's injuries were proximately caused by a defective condition of the fluorescent bulb.

The Court will next address the requirement that the defect must have existed at the time the product left the manufacturer's control together with plaintiffs' claim that defendant "placed into the stream of commerce the subject bulb, whether by negligence or otherwise" and that defendant is liable based on the doctrine of *res ipsa loquitur* [*see* Doc. 26]. Relying on *Browder* and *Fulton*, defendant argues that "Tennessee courts have held for decades that *res ipsa loquitur* is 'not a substitute for proof of defect'" and therefore plaintiffs cannot avail themselves of the doctrine [Doc. 28, pp. 16–17 (quoting *Browder*, 541 S.W.2d at 404)].

Plaintiffs respond that the doctrine of *res ipsa loquitur* is available because a fluorescent bulb does not "violently explode" in the normal course of handling, as it did in this case [Doc. 26 ¶ 7]. They point to *Coca-Cola Bottling Works, Inc. v. Crow*, 291 S.W.2d 589 (Tenn. 1956), wherein the Tennessee Supreme Court allowed the *res ipsa loquitur* doctrine to prove negligence in a products liability case involving a bottle that exploded where "affirmative evidence" of negligence was not available [Doc. 32, p. 20]. Relying on this decision, plaintiffs argue there is "evidence that the [fluorescent] bulb[] [was] handled with due care and nevertheless failed" [*Id.* at 23]. In reply, defendant argues:

To the extent that *Coca-Cola Bottling* may have once permitted *res ipsa* in a product case based on negligence, the Tennessee Supreme Court clarified that rule by 1976: "The doctrine of *res ipsa loquitur* is not a substitute for proof of defect." *Browder v. Pettigrew*, 541 S.W.2d 402, 404 (Tenn. 1976). More importantly, *Coca-Cola Bottling* was decided twenty-two years before Tennessee enacted a product liability statute. *See* Tenn. Code Ann.

§ 29-28-101 (The TPLA may "be cited as the 'Tennessee Products Liability Act of 1978")[.] Cases after 1978 also hold that *res ipsa* is unavailable to prove a defect in a product liability case. *Harwell v. Am. Med. Sys, Inc.*, 803 F. Supp. 1287, 1298 (M.D. Tenn. 1992); *Fulton*, 872 S.W.2d at 912.

[Doc. 36, p. 6].

Echoing the reliance that *Bradley* placed in *Browder*, the Court analyzes *Browder* for an explanation of the interplay of *res ipsa loquitur* in a products liability case which involved a Mustang automobile that went out of control following the collapse of a wheel support frame. 541 S.W.2d at 403. In *Browder*, the complaint charged the defendants with "negligence, expressly relying on the doctrine of Res ipsa loquitur; breach of express and implied warranties; strict liability in tort; and tortious misrepresentation based on public advertising." *Id.* In explaining the meaning of the doctrine of *res ipsa loquitur*, the Tennessee Supreme Court elaborated:

The doctrine of Res ipsa loquitur is not a substitute for proof of defect. The correct application in a products liability case is set forth in *Mosier v. American Motors Corp.*, 303 F. Supp. 44 (S.D. Tex. 1967), Affirmed 414 F.2d 34 (5th Cir. 1969), as follows:

'If there is sufficient evidence of causation, Res ipsa loquitur may be invoked to supply, a reasonable inference of negligence.'

'When sufficient evidence has been adduced by Plaintiff to show that injury resulted from a defect in the product, the evidence must also justify the finding that the defect was probably present when the product left Defendant's control; and such [d]efect was of a nature and kind that would not ordinarily be present in the instrumentality at the time of delivery by the manufacturer in the absence of negligence.'

Id. at 404 (citations omitted) (emphasis added).

The Tennessee Supreme Court then acknowledged that "if evidence was introduced from which a jury reasonably could find a defect in the Mustang Mach I which proximately caused the one-car accident and resulting injuries and damages, the action of [the plaintiff] should have been submitted to the jury on the several theories plead by her, not just under the theory of *Res ipsa loquitur*." *Id.* at 404–05. In analyzing the evidence, the court explained:

When the ... evidence is considered in the light most favorable to the plaintiffs, as we are required to do in reviewing judgments directing verdicts for the defendants, we think the jury reasonably could find that the accident causing plaintiffs' injuries and damages was proximately caused by a defective lower support arm. There is evidence that the automobile, on the day of the accident, was in the same condition it was in when it left Ford Motor Company and when it was sold by Pettigrew to the Grays. The testimony of Mrs. Gray and Mrs. Browder negated driver negligence and improper handling or use of the automobile as possible causes of the accident, thereby creating the inference that the support arm failed under normal use and that the failure caused the accident. The inference was buttressed by the testimony of Mr. Province that the nature and extent of the damage to the automobile eliminated an external blow as a cause. The testimony of the expert, Mr. Daly, though persuasive, did no more than raise the contradictory inference that the accident caused the damage to the lower support arm which plaintiffs' testimony suggests was defective before the accident. A contradiction which, under the rules, must be resolved by the jury.

Id. Ultimately, the Tennessee Supreme Court sustained the judgment of the court of appeals which "revers[ed] the trial court and remand[ed] for trial the actions brought by Mrs. Browder and Glen Gray under the doctrine of Res ipsa loquitur." Id. at 407. The court also reversed the judgment of the court of appeals which sustained directed verdicts for the defendants and against the plaintiff on the issues of strict liability, warranty, and misrepresentation, as it was "based on the erroneous proposition that there was no proof of

a defect in the automobile when it left the control of the defendant, which proximately caused the action." *Id.*

The Court first observes that defendant fails to acknowledge that the Tennessee Supreme Court in *Browder* agreed with the court of appeals that the trial court should be reversed and a new trial commence on the plaintiff's actions, including *res ipsa loquitur*. *See generally* Docs. 28, 36. Next, the Court finds that defendant's reliance on *Fulton* and *Harwell* is misplaced because those cases involved technically complex medical devices such that expert testimony was required and *res ipsa loquitur* was not available. *Fulton*, 872 S.W.2d at 912; *Harwell*, 803 F. Supp. at 1298.

As determined above, plaintiffs are not required to produce expert testimony as to a specific error in the fluorescent bulb; they can rely on circumstantial evidence about plaintiff's proper use and handling of the bulb and the nature of the malfunction to show "something was wrong" with the bulb "in a general sense and as understood by layman." *See Bradley*, 800 F.3d at 210 (quoting *Browder*, 541 S.W.2d at 406). The record reveals that the fluorescent bulbs, including the bulb at issue, were installed by Lloyd's on December 4, 2013, and they were not changed or replaced until the day of plaintiff's accident [Doc. 27-3, pp. 6–7; Doc. 32-1, pp. 14, 56, 59; Doc. 32-2, p. 3]. Further, a photograph of the fixture following plaintiff's accident shows that the two replacement fluorescent bulbs were working [Doc. 27-4, pp. 7–8; Doc. 27-2, p. 2; Doc. 32-1, p. 54].

Browder illustrated that the plaintiff's testimony negated driver negligence and improper handling as possible causes for the accident, and the expert testimony raised a

contradictory inference. 541 S.W.2d at 404–05. Similarly, here, plaintiff's testimony negates improper handling of the fluorescent bulb at the summary judgment stage, and defendant's experts raise a contradictory explanation. Therefore, for the same reasons articulated in *Browder*, and given the existence of sufficient evidence as to proximate cause, as discussed *supra*, the Court finds that genuine issues of material fact exist as to whether a defect in the fluorescent bulb existed at the time it left defendant's control and further that the doctrine of *res ipsa loquitur* can proceed to a jury.

Accordingly, for all of the reasons set forth above, defendant's motion for summary judgment on plaintiffs' claim that the fluorescent bulb was in a defective condition at the time it left the manufacturer's control and proximately caused plaintiff's injuries is **DENIED**.

C. Unreasonably dangerous condition

A product is "unreasonably dangerous" under the TPLA if it is:

dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics, or that the product because of its dangerous condition would not be put on the market by a reasonably prudent manufacturer or seller, assuming that the manufacturer or seller knew of its dangerous condition.

Tenn. Code Ann. § 29-28-102(8). "Tennessee law provides two tests for determining whether a product is unreasonably dangerous" — the "consumer expectation test" and the "prudent manufacturer test." *Sigler*, 532 F.3d at 483–84. The tests "are not exclusive of one another and therefore either one or both of [them] are applicable to cases where the

product is alleged to be unreasonably dangerous." *Jackson v. Gen. Motors Corp.*, 60 S.W.3d 800, 806 (Tenn. 2021).

"The consumer expectation test assesses 'whether the product's condition poses a danger beyond that expected by an ordinary consumer with reasonable knowledge." *Tatham v. Bridgestone Ams. Holding, Inc.*, 473 S.W.3d 734, 750 (Tenn. 2015) (quoting *Ray ex rel. Holman v. BIC Corp.*, 925 S.W.2d 527, 529 (Tenn. 1996)). Stated another way, "[u]nder this test, a product is not unreasonably dangerous if the ordinary consumer would appreciate the condition of the product and the risk of injury." *Id.* (quoting *Ray*, 925 S.W.2d at 530). The test is, "by definition, buyer oriented[.]" *Maness v. Boston Sci.*, 751 F. Supp. 2d 962, 968 (E.D. Tenn. 2010) (quoting *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426, 428–29 (6th Cir. 2007)). Because the test requires a jury to "employ its own sense of whether the product meets ordinary expectations," expert testimony is not required. *Bradley*, 800 F.3d at 210–11 (quoting *Jackson*, 60 S.W.3d at 805–06).

On the other hand, the "seller-oriented" prudent manufacturer test, *Maness*, 751 F. Supp. 2d at 968 (quoting *Johnson*, 484 F.3d at 428–29), "assesses whether, given the imputed knowledge of the condition of the product, a prudent manufacturer would place such a product into the stream of commerce." *Tatham*, 473 S.W.3d at 750 (citing *Ray*, 925 S.W.2d at 530). The prudent manufacturer test "employs a risk-utility balancing of various factors and ... requires expert testimony with respect to the prudence of a defendant's decision to market the product." *Kines v. Ford Motor Co.*, 558 F. Supp. 3d 614, 628 (W.D. Tenn. 2021) (citations omitted).

Defendant maintains that plaintiffs cannot prove that the subject fluorescent lamp was unreasonably dangerous under either the consumer expectation test or the prudent manufacturer test [Doc. 28, pp. 17–21]. As indicated in their response in opposition, plaintiff is traveling only under the consumer expectation test "due to the ubiquitous nature and utility of fluorescent lighting" [Doc. 32, p. 17]. The Court agrees that it is appropriate to review whether a fluorescent bulb is an unreasonably dangerous condition under the consumer expectation test because it is a product in which the everyday experience of ordinary consumers can be fairly employed. *See Ray ex rel. Holman*, 925 S.W.2d at 531 ("[O]rdinary consumers would have a basis for expectations about the safety of a can opener or coffee pot, but, perhaps, not about the safety of a fuel-injection engine or an air bag."). Further, as argued by defendant, plaintiffs could not proceed under the prudent manufacturer's test without expert testimony, and Judge McCook's ruling as to Kelly precludes that possibility. *See Kines*, 558 F. Supp. 3d at 628.

With respect to the consumer expectation test, defendant argues that plaintiff, who was familiar with eight-foot fluorescent lamps because he changed them before, understood that if he dropped the "glass and fragile" bulb, it might break [Doc. 28, p. 18]. Further, defendant points out that plaintiff knew it was important to be careful while changing the fluorescent bulb and therefore he "appreciated the condition of the product and the risk of injury" [Id.]. In response, plaintiffs recognize the points raised by defendant but state "that is not the hazard or danger that caused [plaintiff's] injuries" [Doc. 32, p. 18]. Relying on the same evidence discussed earlier as to the defective condition claim, plaintiff

states 1) that he was careful in his handling of the glass bulb and did not crush it or strike it on anything, 2) that the bulb exploded merely from the routine activity of removing the bulb from its fixture, and 3) that he never expected the bulb could or would implode and forcibly disperse glass in a manner that looked and felt like an explosion [*Id.*].

Regarding plaintiff's severe injury, plaintiffs also point to "the very real physical evidence of a large piece of [his] upper arm having been violently disrupted from his arm and propelled away from his body" [Id.]. Plaintiffs submit that both Kelly and Dr. Moss substantiate this proof [Id. at 18–19]. Further, Powell testified that an observer who experiences a fluorescent bulb fracturing, which involves air rushing in to fill the vacuum with a sharp noise and glass fragments forcibly dispersing, might perceive this phenomenon as the lamp exploding [Id. at 19]. In reply, defendant asserts that if plaintiffs' theory is correct, then "the millions of fluorescent lamps currently in use around the world are also unreasonably dangerous" [Doc. 36, p. 8]. Defendant contends that this is refuted by Kelly failing to find "any reports of a similar incident despite the volume of these lamps in operation" [Id. (emphasis in original)].

Viewing the admissible evidence in the light most favorable to plaintiffs, the Court finds that genuine issues of material fact preclude summary judgment on plaintiffs' claim that the fluorescent bulb was unreasonably dangerous under the consumer expectation test. Plaintiffs are entitled to produce evidence of the objective conditions of the fluorescent bulb and allow a jury to use its own sense of whether the bulb meets ordinary expectations and would not explode in the manner it did when plaintiff handled the bulb in a normal,

careful way. *See Bradley*, 800 F.3d at 210–11 (finding that the district court "committed an additional error by not allowing [the plaintiff] to proceed under the consumer expectation test and **rely on lay testimony** about the objective facts and circumstances surrounding the [product]") (emphasis added).

This conclusion is also supported by *Hughes v. Lumbermens Mut. Cas. Co., Inc.*, 2 S.W.3d 218 (Tenn Ct. App. 1999). In *Hughes*, the plaintiffs brought a products liability case when a multi-piece truck rim assembly exploded and caused injuries. *Id.* at 221. The jury returned a verdict for the defendant, which the trial court approved. *Id.* On appeal, the court held that the trial judge erred by refusing to give a requested jury charge on the consumer expectation test where the plaintiffs offered evidence of the expectations of users of the rim assemblies, who were aware of their characteristics and expected performance, and did not expect them to explode if they remained intact after inflation in the safety cage. *Id.* at 226.

Accordingly, for all of the reasons set forth above, defendant's motion for summary judgment on plaintiffs' claim that the fluorescent bulb was in an unreasonably dangerous condition is **DENIED**.

D. Failure to warn

Under a failure-to-warn theory, "the plaintiff must show that: (1) the warnings at issue were defective; (2) the defective warning made the product unreasonably dangerous; and (3) the inadequate labeling proximately caused the claimed injury." *Lee v. Metro. Gov't of Nashville & Davidson Cnty.*, 596 F. Supp. 2d 1101, 1127 (M.D. Tenn. 2009)

(citing *Barnes v. Kerr Corp.*, 418 F.3d 583, 590 (6th Cir. 2005)). "An action based on an inadequate warning requires not only that the warning itself be defective, but that the plaintiff 'establish [that] the product is unreasonably dangerous by reason of defective warning and ... that the inadequate labelling proximately caused the claimed injury." *Barnes*, 418 F.3d at 590 (quoting *Hurt v. Coyne Cylinder Co.*, 956 F.2d 1319, 1329 (6th Cir. 1992)). "The plaintiff bears the burden of establishing that a product was in a defective condition or otherwise unreasonably dangerous by reason of the manufacturer's failure to provide an adequate warning informing users of the dangers of that product." *Id.* "A product is not unreasonably dangerous because of failure to adequately warn of a danger or hazard that is apparent to the ordinary user." Tenn. Code Ann. § 29-28-105(d). The determination of whether a warning is adequate is usually a question for the jury unless reasonable minds could not disagree on the outcome. *Hurt*, 956 F.2d at 1329 (citing *Young v. Reliance Elec. Co.*, 584 S.W.2d 663, 668 (Tenn. App. 1979)).

Defendant argues that plaintiffs cannot prevail on a failure to warn claim because the danger that the glass tube of an eight-foot fluorescent bulb might break is apparent to both an ordinary user and plaintiff himself [Doc. 28, pp. 15–16]. Defendant states that the unrebutted expert evidence is that fluorescent lamps cannot explode because they operate at extremely low pressure, such that "[i]t makes little sense for a company to provide a warning that an impossible event might happen" [*Id.* at 15]. Defendant also points out that plaintiff did not review any warnings for this type of fluorescent lamp for "either the original lamp which shattered or the replacement bulb (made by a different company) that

he planned to install" [Id.]. As defendant further argues, given his familiarity with changing similar lamps in his garage, plaintiff "knew about the risk that it might break if mishandled," just as his coworkers understood the same risk [Id. at 15–16]. Defendant maintains that a failure to warn claim is foreclosed because plaintiffs cannot show "(a) [that] any warning was defective (since the product cannot explode as he alleged), (b) that the defective warning made the product unreasonably dangerous (for the same reason), or (c) that the inadequate labeling proximately caused the claimed injury (since he did not read any warnings)" [Id. at 16]. In its reply brief, defendant also cites to the Sixth Circuit's holding in Hurt that inadequate labeling cannot be the proximate cause of a plaintiff's injuries where the plaintiff failed to read the warning [Doc. 36, p. 10].

In opposition, plaintiffs contend that defendant's "failure to warn about potential implosion and forced dispersal of glass was ... negligent" [Doc. 32, p. 23]. Plaintiffs point to Powell's testimony that air rushing in to fill the vacuum of a fractured fluorescent bulb creates a sharp noise and results in glass fragments forcibly dispersing, such that it might appear to an observer as if the lamp exploded. They also point to Sohl's testimony that a T12 fluorescent lamp can break if a user strikes the glass tube against a solid object. In the face of these suggestions that a fluorescent bulb only breaks from mishandling or striking it on another object, plaintiffs argue that Sohl's additional testimony that defendant has "never received a verified complaint of a T12 exploding due to a product failure" is "equivoc[al]" because she did not "conclusively state that [defendant] has 'never' had a

complaint of a lamp exploding due to product failure" [*Id.* (emphasis in original)]. Therefore, plaintiffs defend against summary judgment on this issue by arguing:

Because [defendant] is aware (and has been aware of the phenomenon of the bulb forcibly dispersing glass when it is broken, it had a duty to place a warning on the lightbulb, in its [SDS], and on its packaging that this can occur, regardless of what causes the lightbulb to break (i.e., product failure or mishandling). Because [defendant's] own experts testify that a broken T12 lightbulb behaves in a manner that mimics an explosion, its failure to warn of this fact and to only warn about cuts from broken glass was negligent.

[*Id*.].

The Court agrees that the Sixth Circuit's decision in *Hurt* is determinative in evaluating plaintiffs' failure to warn claim. In *Hurt*, the plaintiff was severely injured when he was engulfed in flames from an explosion of an acetylene cylinder. 956 F.2d at 1322. With respect to the plaintiff's claim that the warning label on the cylinder was inadequate, the appellate court relied on the case of *Goins v. Clorox Co.*, 926 F.2d 559 (6th Cir. 1991), in which the defendants were granted summary judgment because the plaintiff failed to show a proximate cause between the injury and defective labels, which had never been read. *Id.* at 1329. Applying that rationale, the Sixth Circuit then concluded:

Here, as in *Goins*, no proximate cause existed between the warning label and Hurt's injury because Hurt failed to read the warning. After viewing the evidence most favorably to the plaintiff, a reasonable mind could have drawn only one conclusion: the warning label placed on the cylinder by Liquid Air was not a factor in the injuries to Hurt because there was no evidence that the warning label had ever been read and there was no evidence of causation with regard to the label.

Id.

Similarly, here, the evidence in the record is that the fluorescent bulbs, including the bulb at issue, were installed by Lloyd's on December 4, 2013, without change or replacement until plaintiff's accident, and plaintiff had no personal knowledge about the installation because did not work at the transfer station at the time [Doc. 27-3, pp. 6–7; Doc. 32-1, pp. 14, 56, 59; Doc. 32-2, p. 3]. For that matter, plaintiff stated that he did not look at or see any warnings on the new Philips-brand replacement bulbs because he had changed these types of fixtures before and never had an issue [Doc. 27-3, pp. 16–17]. Therefore, as *Hurt* and *Goins* make clear, the Court concludes that plaintiffs' failure to warn claim cannot proceed because there is no evidence that plaintiff read any warnings, labels, or the SDS with respect to the fluorescent bulbs. Without such proof, plaintiffs cannot demonstrate any proximate cause existed between the warning label and the injury that plaintiff sustained.

Accordingly, for the reasons set forth above, defendant's motion for summary judgment on plaintiffs' claim of failure to warn is **GRANTED**.

E. Breach of warranty

In order to establish a prima facie claim for breach of express warranty, a "plaintiff must prove: (1) that the seller made an affirmation of fact intending to induce the buyer to purchase the goods; (2) that the buyer was in fact induced by the seller's acts; and (3) that the affirmation of fact was false regardless of the seller's knowledge of the falsity or intention to create a warranty." *Coffey v. Dowley Mfg., Inc.*, 187 F. Supp. 2d 958, 969 (M.D. Tenn. 2002), *aff'd*, 89 F. App'x 927 (6th Cir. 2003) (citing *H.B.H. Enter., Inc. v.*

Cates, No. 03A01-9608-CV-00252, 1997 WL 76804, at *2 (Tenn. Ct. App. 1997)). Defendant argues that plaintiffs' breach of warranty claim fails because plaintiff "had no knowledge of the purchase of or installation of the lamps in 2013 and thus [defendant] made no express statement to him about the lamp" [Doc. 28, p. 12 n.3]. Plaintiffs have not responded to this argument in any of their filings.

For the same reasons outlined above on the failure to warn claim, specifically that plaintiff was not working at the transfer facility in 2013 and had no knowledge about the installation of the fluorescent bulbs at that time, the Court finds that plaintiffs' breach of warranty claim fails because there is no evidence that plaintiff was induced by a false affirmation of fact by defendant. *See Strayhorn v. Wyeth Pharm., Inc.*, 737 F.3d 378, 395 (6th Cir. 2013) (finding no merit in the plaintiffs' express warranty claims where they did not identify any affirmation of fact made on the product labeling that they alleged to be false).

Accordingly, for the reasons set forth above, defendant's motion for summary judgment on plaintiffs' claim of breach of warranty is **GRANTED**.

F. Comparative fault

Under Tennessee law, a plaintiff may recover "so long as [his] negligence remains less than the defendant's negligence," in which case "[his] damages are to be reduced in proportion to the percentage of the total negligence attributable to the plaintiff." *McIntyre* v. *Balentine*, 833 S.W.2d 52, 57 (Tenn. 1992). This comparative fault principle applies to products liability actions based on strict liability in tort. *Lofgren v. Polaris Indus. Inc.*, 509

F. Supp. 3d 1009, 1022 (M.D. Tenn. 2020) (citing *Whitehead v. Toyota Motor Corp.*, 897 S.W.2d 684, 693 (Tenn. 1995)). As the Tennessee Supreme Court explained:

The same form of modified comparative fault that we adopted in *McIntyre*, under which a plaintiff can recover as long as his fault is less than that of the defendant with recovery being reduced in proportion to the plaintiff's fault, will apply to strict products liability actions. The triers of fact will determine the percentage of a plaintiff's damages that is attributable to the defective or unreasonably dangerous product as well as the percentage that is attributable to the plaintiff's own fault.

Whitehead, 897 S.W.2d at 693.

Summary judgment based on comparative fault is appropriate if, viewing the evidence in the light most favorable to the nonmoving party, "reasonable minds could not differ that [the plaintiff's] fault was equal to or greater than that of the defendant[]." Halmon v. Lane College, No. W2019-01224-COA-R3-CV, 2020 WL 2790455, at *3 (Tenn. Ct. App. May 29, 2020) (citing Staples v. CBL & Assocs., Inc., 15 S.W.3d 83, 91–92 (Tenn. 2000)). Given that comparative fault is an affirmative defense, "the defendant must 'conclusively establish [the] affirmative defense' by pointing to undisputed facts that prove Ellington v. Jackson Bowling & Family Fun Center, L.L.C., No. the defense." W2012-00272-COA-R3-CV, 2013 WL 614502, at *10 (Tenn. Ct. App. Feb. 19, 2013) (quoting McMahan v. Sevier Cnty., No. E2005-02028-COA-R3-CV, 2007 WL 1946650, at *2 (Tenn. Ct. App. July 3, 2007)). Moreover, it is well settled that "comparative fault is typically a question for the trier of fact." Ellington, 2007 WL 614502, at *10 (quoting Norris v. Pruitte, No. 01A01-9709-CV-00506, 1998 WL 1988563, at *3 (Tenn. Ct. App. Aug. 24, 1998)).

Defendant asserts that plaintiffs' claims are barred based upon the undisputed expert evidence that plaintiff's comparative fault or assumption of risk was the sole cause of his injuries [Doc. 28, pp. 21–23]. First, defendant maintains that plaintiff was "negligent in numerous ways by using th[e] ladder, including (1) he failed to inspect the ladder for proper feet before use, (2) he failed to heed the warning that the ladder section was not designed for [separate] use, and (3) he used the fly section by itself in derogation of that warning" [Id. at 21–22]. Defendant also points out that plaintiff failed to secure the ladder and that Waste Connections concluded this was a preventable accident because he used an unsafe ladder [Id. at 22]. Next, defendant draws attention to Powell's testimony that fluorescent bulbs do not spontaneously explode and therefore the bulb in this case must have shattered because it was improperly handled or impacted another object. Given these undisputed facts, defendant argues that "the only reasonable inference a jury could draw is that the cause of the lamp breaking was either (a) [plaintiff] mishandled or dropped the lamp, or (b) the ladder slipped out from under him, resulting in the lamp impacting another hard object such as the wall, the ladder, or the ground" [Id.].

In response, plaintiffs assert that genuine issues of material fact exist concerning plaintiff's use of the ladder [Doc. 32, pp. 24–25]. Plaintiffs argue that Dr. Knox's statement that "[plaintiff] Greene's testimony and the Tennessee Department of Labor First Report of Injury indicate that the ladder slipped and fell to the ground" is "hardly undisputed" because plaintiff notified management and made corrections to the forms indicating that he did not slip and fall off the ladder while changing the bulb [*Id.* at 24].

Plaintiffs also point to Childers's acknowledgement that plaintiff stated he did not slip and fall off the ladder but rather the bulb exploded which then caused him to fall off the second or third rung of the ladder [*Id.* at 25]. Finally, plaintiffs assert that the factual section from his workers' compensation settlement, which was jointly presented, states that the fluorescent bulb exploded while plaintiff was standing on the ladder and caused a traumatic injury [*Id.*].

In reply, defendant contends that the undisputed expert evidence from Powell and Dr. Knox shows that plaintiff's comparative fault was the cause of the accident [Doc. 36, pp. 11–16]. Specifically, defendant argues:

Even if we ignore the physical evidence and [defense] expert's unrebutted conclusions to credit [plaintiff] Greene's contradictory contentions, it is still undisputed that (1) the ladder was unsafe because it was the fly section of an extension ladder, (2) the ladder had an express warning on it not to use it separate from the base section, (3) [plaintiff] Greene's employer concluded that the root cause of the accident was failure to use proper equipment, and (4) [plaintiff] Greene's employer removed the ladder from service as unsafe.

[*Id.* at 16].

Viewing the evidence in the light most favorable to the nonmoving party, the Court finds that plaintiffs have pointed to numerous genuine issues of material fact on the issue of plaintiff's comparative fault which should be determined by a jury, including for many of the same reasons set forth above in the sections addressing the defective or unreasonably dangerous condition of the fluorescent bulb. In addition, the Court notes that Kelly's rebuttal testimony which is responsive to Dr. Knox's opinions about the ladder is still admissible, as Judge McCook did not strike this testimony [see Doc. 61, p. 24]. To the

extent that defendant has submitted evidence that may call into question plaintiff's account of how the accident occurred, this is a credibility question that should be left to the sound judgment of a jury.

Accordingly, for all of the reasons set forth herein, defendant's motion for summary judgment on the issue of plaintiff's comparative fault is **DENIED**.

G. Loss of consortium

Under Tennessee law, "[a] loss of consortium claim is a derivative claim, and recovery is dependent on the spouse's recovery." *Yebuah v. Ctr. for Urological Treatment, PLC*, 624 S.W.3d 481, 488 (Tenn. 2021) (citing *Tuggle v. Allright Parking Sys., Inc.*, 922 S.W.2d 105, 109 (Tenn. 1996)). "A spouse seeking recovery for loss of consortium cannot recover unless the defendant has been held liable to the injured spouse." *Williams v. United States*, 754 F. Supp. 2d 942, 955 (W.D. Tenn. 2010) (citing *Swafford v. City of Chattanooga*, 743 S.W.2d 174, 178 (Tenn. Ct. App. 1987)).

As its final ground for summary judgment, defendant argues that plaintiff Nicole Greene's derivative claim for loss of consortium fails because "the undisputed facts show that [defendant] is not liable for [plaintiff] Greene's injuries" [Doc. 28, p. 23]. As discussed above, the Court has found that genuine issues of material fact exist 1) as to the claim that the fluorescent bulb was in a defective or unreasonably dangerous condition, 2) as to the claim that the defect existed at the time the bulb left the manufacturer's control, including under the doctrine of *res ipsa loquitur*, 3) as to the claim that the defective or unreasonably condition proximately caused plaintiff's injuries, and 4) as to plaintiff's comparative fault.

On the other hand, the Court has found there are no genuine material disputes on plaintiffs'

claims of failure to warn and breach of warranty.

Accordingly, given that plaintiff Nicole Greene's consortium claim rises and falls

on her husband's claims, the Court finds that defendant's motion for summary judgment

on the loss of consortium claim is **DENIED** in part and **GRANTED** in part consistent

with its earlier rulings. See, e.g., Wentz v. Best Western Int'l, Inc., No. 3:05-CV-368, 2007

WL 869620, at *4 (E.D. Tenn. Mar. 20, 2007) (dismissing a spouse's loss of consortium

claim when the injured spouse's claims were also subject to dismissal).

IV. Conclusion

For the reasons set forth above, defendant's motion for summary judgment

[Doc. 27] will be **GRANTED** in part and **DENIED** in part. Plaintiffs' claims of failure

to warn and breach of warranty will be DISMISSED, and the remainder of plaintiffs'

claims will be allowed to proceed to a jury.

IT IS SO ORDERED.

s/ Thomas A. Varlan
UNITED STATES DISTRICT JUDGE

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